

# Genetics 302 Handouts

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3 Jan94, rvsd 2Jan96, 6Jan97, 5Jan98, 4Jan00, 16Feb01, 2Jan03, 2Jan04, 1Jan06, 4Jan08, 30Dec08, 29Dec09, 28Dec10, 23Dec11

[http://biology.clc.uc.edu/fankhauser/Labs/Genetics/Genetics\\_Table\\_Contents.html](http://biology.clc.uc.edu/fankhauser/Labs/Genetics/Genetics_Table_Contents.html)

page	Handout:	
1.	Table of Contents	Handed out
2.	Genetics 302 Syllabus	in Lecture.
3.	How to take a Fankhauser Genetics Course	Not required
4.	Chronological Listing of Genetics Wordstems	in Laboratory
5.	Genetics Wordstems, Cumulative List with meanings	Notebook
6.	How to Get Full Credit for Homework	
7.	Study Groups: Towards Effective Peer Education	
8.	Genetics Study Group Report Form	

### NB pg GENETICS LABORATORY HANDOUTS FOR THE NOTEBOOK

_____	9.	Genetics 302 Laboratory Activities	(mount inside front cover NB)
_____	10.	Laboratory Notebook Procedure	(mount on page 2 of NB)
_____	11.	<i>Format Suggestions for Table of Contents</i>	<i>If you have Fall Cell NB</i>
_____	12.	<i>Use of Contact Paper for Mounting Handouts</i>	grade sheet mounted.
_____	13.	<i>Notebook Illustrations</i>	you do not need these.
_____	14.	First Genetics Notebook Grade Sheet, from previous year	
_____	15.	Second Genetics Notebook Grade Sheet, from previous year	
_____	16.	Sprouting Seeds	
_____	17.	Extraction of Thymus DNA	
_____	18.	Dissecting Scope Care and Use	
b	19.	Binocular Microscope: Its Features and Care; Microscope Storage Gradesheet	
_____	20.	How to View a Slide	
_____	21.	Use of Oil Immersion Objective	
b	22.	22a: Root Tip Harvest, 22b: Preparation of Feulgen Stain	
_____	23.	Staining Plant Root Tips to See Chromosomes	
_____	24.	Culturing and Handling <i>Drosophila melanogaster</i>	
_____	25.	<i>Drosophila</i> Salivary Gland Chromosomes	
_____	26.	Demonstration of importance of sample size. ( $\chi^2$ Analysis example)	
_____	27.	$\chi^2$ probability table	
_____	28.	Practice Preparing, Loading and Running Electrophoresis Gels	
b	29.	29a: Electrophoretic Separation of DNA Fragments. 29b: Ethidium bromide	
_____	30.	Endonuclease Digestion of DNA	
b	31.	31a: Isolation of Buccal Cell DNA, 31b: Isolation of DNA from Hair Root	
_____	32.	Polymerase Chain Reaction Protocol	
b	33.	33a: Assay of $\beta$ Galactosidase in Bacterial Cultures, 33b: Reagents	
_____	34.	Gene regulation: growth and harvest of <i>E. coli</i> cells exposed to lactose	
_____	35.	Assay of $\beta$ Galactosidase in <i>E. coli</i> exposed to lactose	